

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VICTOR L. MYLROIE

Appeal No. 94-2033
Application No. 07/982,141¹

ON BRIEF

Before WINTERS, WILLIAM F. SMITH and GARRIS, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 1 through 13, which are all of the claims in the application.

REPRESENTATIVE CLAIMS

¹ Application for patent filed November 25, 1992. According to appellant, this application is a continuation of Application No. 07/473,006, filed January 31, 1990, now abandoned.

Appeal No. 94-2033
Application No. 07/982,141

Claims 1 and 8, which are illustrative of the subject matter on appeal, read as follows:

1. A method of producing aromatic primary amines of the formula $R-Ar-NH_2$ which comprises catalytically hydrogenating an aromatic nitro compound of the formula $R-Ar-NO_2$ which is derived from a sulfur-containing compound which is contaminated with sulfur, the hydrogenation being carried out in the presence of a chromium-containing Raney cobalt catalyst and wherein R is a radical selected from the group consisting of Het-, Het-NH-, Het-Alk- and Het-Alk-O- and wherein Het- is a mono- or bi-cyclic nitrogen-containing unsaturated heterocyclic radical, Alk- being a straight or branched chain alkylene radical of up to about 15 carbon atoms and -Ar- being a phenylene or a naphthylene radical.

8. A method according to claim 1 wherein the compound $R-Ar-NO_2$ is contaminated with from about 50 to 10,000 ppm of sulfur.

THE REFERENCES

The prior art references relied on by the examiner are:

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|----------------------|-----------|----------------------|
| Petro | 3,997,478 | Dec. 14, 1976 |
| Lentz et al. (Lentz) | 4,929,737 | May 29, 1990 |
| | | (filed Feb. 3, 1988) |

Leopold Horner et al. (Horner), Chemical Abstract 105:114375t, "Hydrogen transfer. 73. Hydrogenolysis studies of sulfur and phosphorus compounds with Raney nickel," 105 General Organic Chemistry 615 (1986).

THE ISSUE

The sole issue presented is whether the examiner erred in rejecting claims 1 through 13 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Lentz, Horner and Petro. According to the examiner, the Lentz patent constitutes

Appeal No. 94-2033
Application No. 07/982,141

legally available prior art in view of its February 3, 1988, filing date.

DELIBERATIONS

Our deliberations in this matter have included evaluation and review of the following materials: (1) the instant specification, including all of the claims on appeal; (2) appellant's Appeal Brief and Reply Brief; (3) the Examiner's Answer (Paper No. 23) and the Supplemental Examiner's Answer (Paper No. 25); (4) the above-cited references relied on by the examiner; (5) appellant's Rule 131 Declaration, executed June 7, 1993; and (6) the opinion and decision entered by another merits panel of the Board in parent application Serial No. 07/473,006, Paper No. 12 (Appeal. No. 92-0636, decided September 25, 1992).

On consideration of the record, including the above-listed materials, we reverse the examiner's rejection under 35 U.S.C. § 103.

DISCUSSION

We first observe appellant's argument that the Rule 131 Declaration, executed June 7, 1993, "precludes the use of the Lentz et al. patent as 102(e) prior art" (Appeal Brief, page 6, line 2). However, for the purposes of this appeal, we find it unnecessary to reach that issue. We shall assume arguendo,

Appeal No. 94-2033
Application No. 07/982,141

without deciding, that the Rule 131 Declaration does not constitute sufficient evidence to antedate Lentz. Regardless, we hold that the combined disclosures of Lentz, Horner and Petro are insufficient to support a conclusion of obviousness of appellant's claimed method.

Lentz here constitutes the closest prior art, and the Lentz method bears close relationship to appellant's claimed method except that appellant recites an aromatic nitro compound "contaminated with sulfur" (independent claim 1). On its face, the Lentz patent does not disclose or suggest nitro aromatic reactants containing even trace amounts of sulfur.

In this regard, the previous merits panel recognized that "the respective methods [Lentz and appellant] differ . . . in the explicit statement of the present claims that the starting material is contaminated with sulfur" (see parent application Serial No. 07/473,006, Paper No. 12, page 3 (Appeal No. 92-0636, decided September 25, 1992)). The previous panel made up that difference or deficiency in Lentz by relying on the acknowledged state of the prior art. According to the previous merits panel, "appellant has admitted (specification, pages 1-2) that such starting materials [aromatic nitro compounds of the type disclosed by Lentz] are routinely contaminated with sulfur" and "appellant admits that aromatic nitro compounds are routinely

Appeal No. 94-2033
Application No. 07/982,141

contaminated with sulfur." Again, see parent application Serial No. 07/473,006, Paper No. 12, page 3. On this basis, the previous merits panel concluded that appellant's claimed method would have been obvious from a consideration of Lentz alone.

We have taken a step back and reevaluated the patentability of appellant's claimed method, taking into account (1) the disclosures of Lentz, Horner and Petro; (2) the statements in appellant's specification relied on by the previous merits panel; and (3) the vigorous arguments by appellant in this appeal that the examiner and the previous merits panel "misconstrued . . . the alleged admissions in applicant's specification" (Appeal Brief, page 9, first full paragraph).

In the Background section of the specification, appellant refers to

an obstacle to the economical synthesis of certain aromatic amino compounds which are used for making dye-forming couplers for color photography inasmuch as their precursor nitro compounds are made from sulfur-containing compounds. [Specification, page 1, lines 28 through 32, emphasis added].

Appellant does not acknowledge or admit that all aromatic amine precursors are contaminated with sulfur, or that the nitro aromatic reactants disclosed by Lentz are contaminated with sulfur. Likewise, we have carefully reviewed the specification, page 10, line 33 through page 11, line 21. Again, appellant does

Appeal No. 94-2033
Application No. 07/982,141

not acknowledge or admit that all aromatic amine precursors are contaminated with sulfur, or that the nitro aromatic reactants disclosed by Lentz are contaminated with sulfur. On the contrary, appellant states that

[i]n the Lentz et al. application [now U.S. Patent No. 4,929,737] there is no disclosure of sulfur-contaminated reactants. [Specification, page 11, lines 15 through 17].

All in all, we believe that the previous merits panel (1) misinterpreted the acknowledged state of the prior art in appellant's specification, and (2) relied on that interpretation in affirming the rejection of the claimed method under 35 U.S.C. § 103 in view of the combined disclosures of Lentz, Horner and Petro.

On this record, claims 1 through 13 define a novel combination of steps, namely, the use of a starting material containing a nitro aromatic compound and sulfur, and the use of a chromium-containing Raney cobalt catalyst. Furthermore, on this record, the claimed method would not have been obvious within the meaning of 35 U.S.C. § 103 because the cited references provide no reason, suggestion, or motivation to use appellant's chromium-containing Raney cobalt catalyst as a solution to the problem of sulfur poisoning. The cited prior art would not have led a person having ordinary skill to select appellant's chromium-

Appeal No. 94-2033
Application No. 07/982,141

containing Raney cobalt catalyst, among many known hydrogenation catalysts, to hydrogenate aromatic nitro compounds contaminated with sulfur. Compare In re Sponnoble, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969) (A patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified.)

The examiner's decision is reversed.

REVERSED

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| SHERMAN D. WINTERS |) | |
| Administrative Patent Judge |) | |
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| WILLIAM F. SMITH |) | BOARD OF PATENT |
| Administrative Patent Judge |) | APPEALS AND |
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Appeal No. 94-2033
Application No. 07/982,141

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